

MARYLAND DEPARTMENT OF HEALTH

HIV Epidemiological Update

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Prevention and Health Promotion Administration

MISSION AND VISION

MISSION

The mission of the Prevention and Health Promotion Administration is to protect, promote and improve the health and well-being of all Marylanders and their families through provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community based organizations, and public and private sector agencies, giving special attention to at-risk and vulnerable populations.

VISION

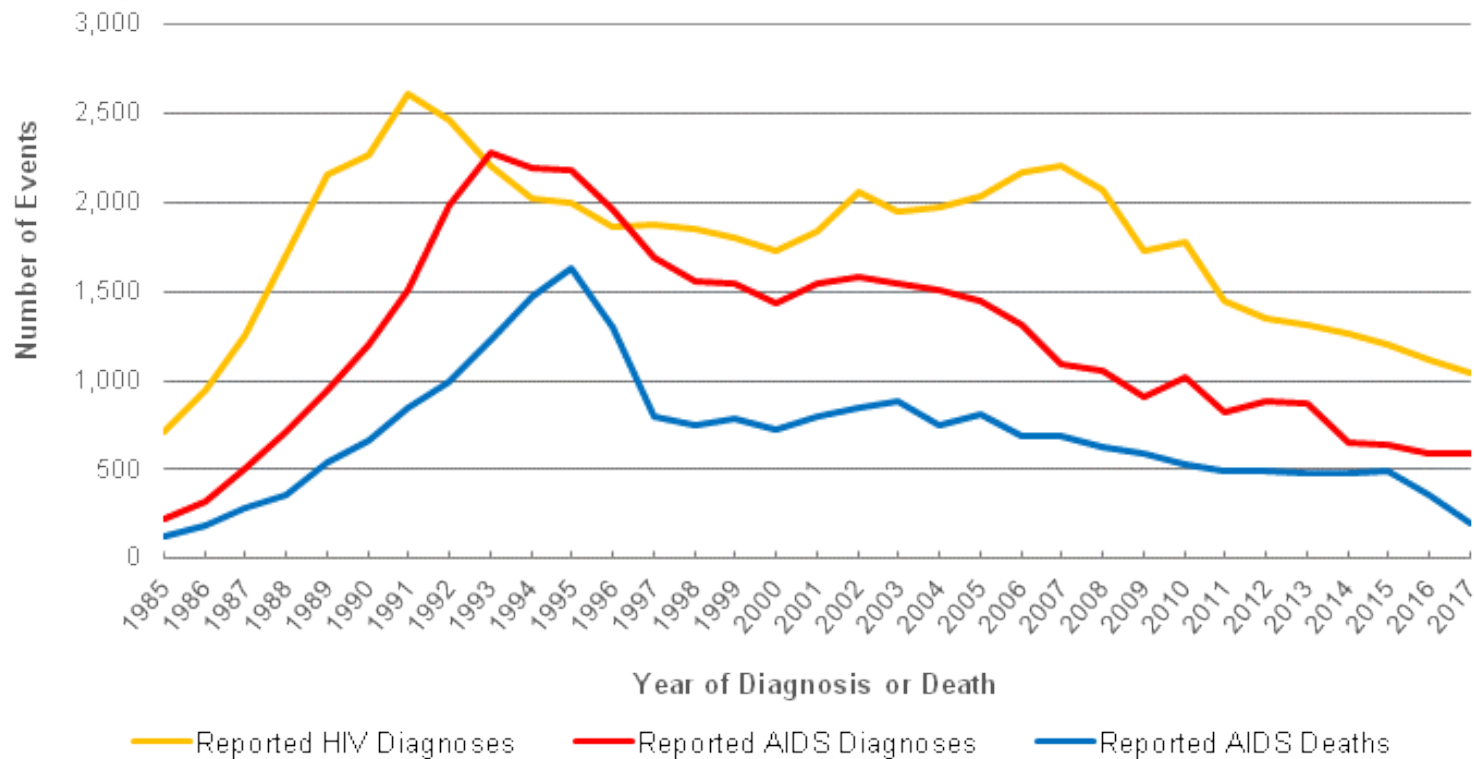
The Prevention and Health Promotion Administration envisions a future in which all Marylanders and their families enjoy optimal health and well-being.

Living Adult/Adolescent HIV Diagnoses, Year-end 2015, Ranked by Rates

Rank	State/Territory	Reported Cases	Rate per 100,000
1	District of Columbia	14,972	2,590.2
2	New York	128,681	768.8
3	U.S. Virgin Islands	558	635.5
4	Maryland	33,072	657.8
5	Florida	106,585	615.2
6	Puerto Rico	16,783	564.0
7	Georgia	49,463	588.0
8	Louisiana	19,492	504.7
9	New Jersey	35,636	473.7
10	Delaware	3,230	404.9
	United States	988,955	364.3



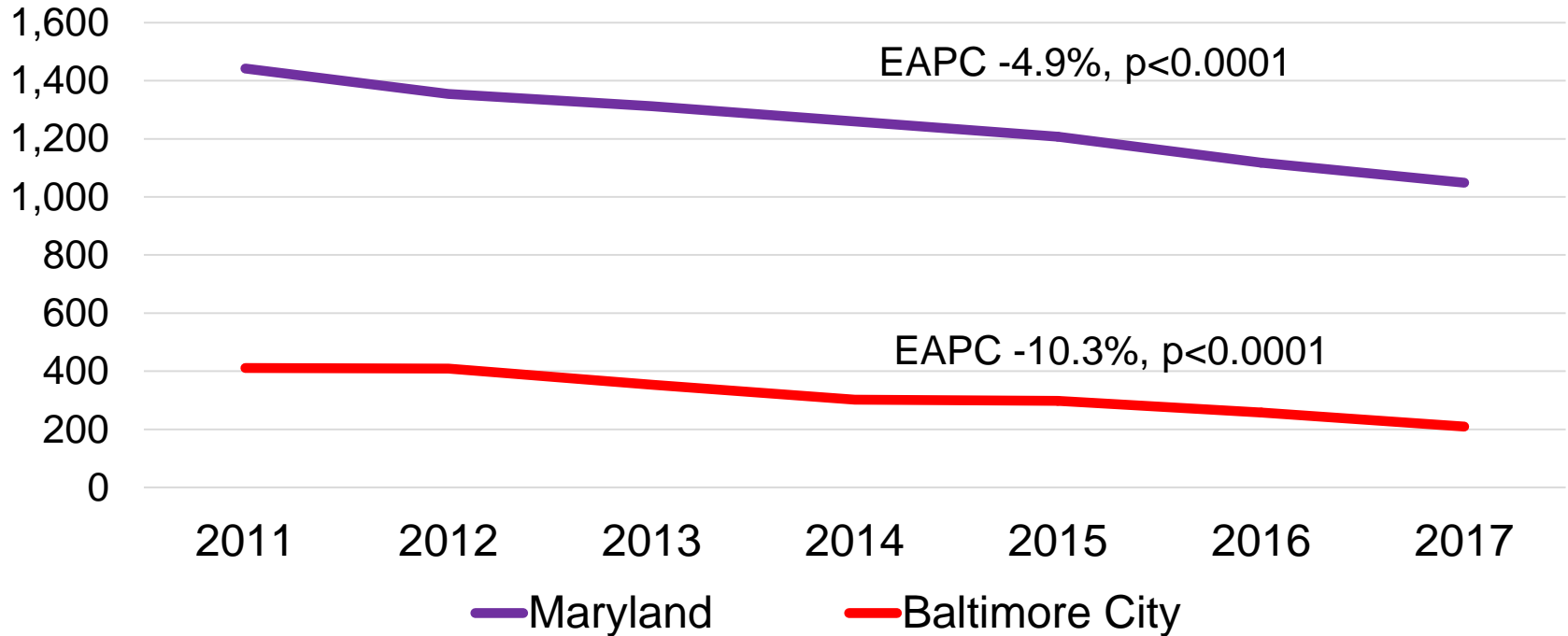
HIV/AIDS Trends



HIV/AIDS Trends

- New HIV diagnoses are declining and 2017 HIV diagnoses (1,043) are the lowest they've been since 1986
- New AIDS diagnoses are declining and 2017 AIDS diagnoses (586) are the lowest they've been since 1987
- Deaths among AIDS cases are stable (just below 500) and are the lowest they've been since 1988
 - Death reporting can be delayed so 2016 and 2017 deaths are incomplete

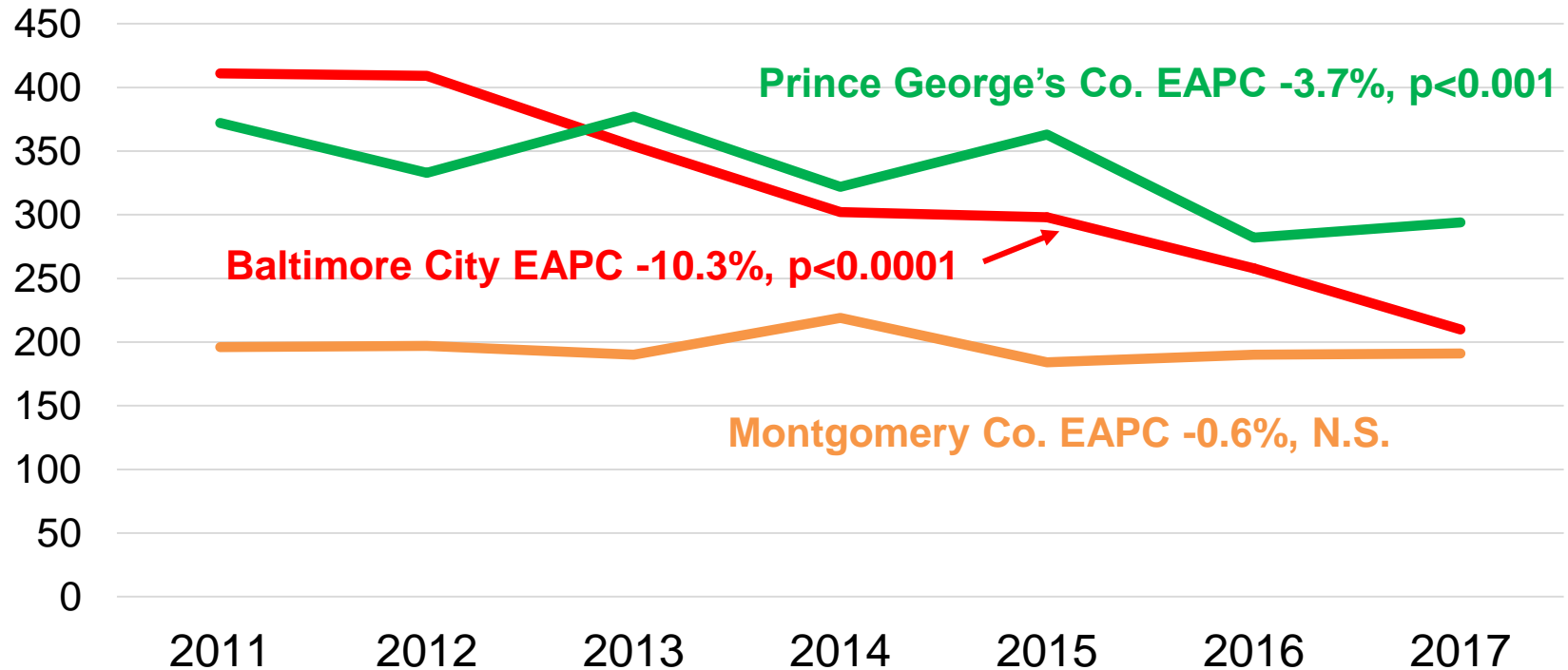
HIV Diagnosis Trends



HIV Diagnosis Trends

- New HIV diagnoses in Maryland decreased by 5% per year from 2011 to 2017
- New HIV diagnoses in Baltimore City decreased by 10% per year from 2011 to 2017
- New HIV diagnoses in Baltimore City (231) are half what they were in 2011
- The percent of new Maryland HIV diagnoses that are residents of Baltimore City decreased to 22%

HIV Diagnosis Trends

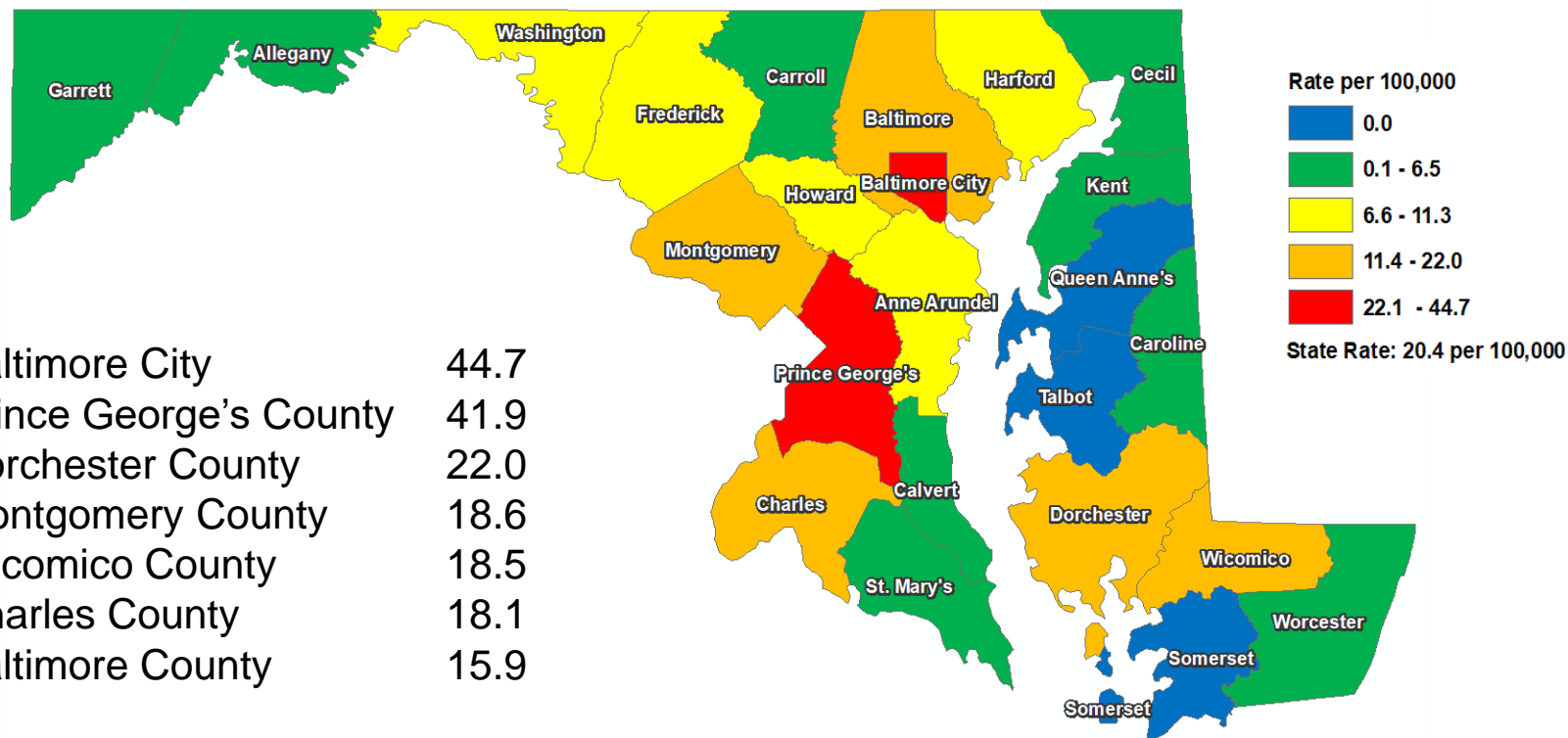


HIV Diagnosis Trends

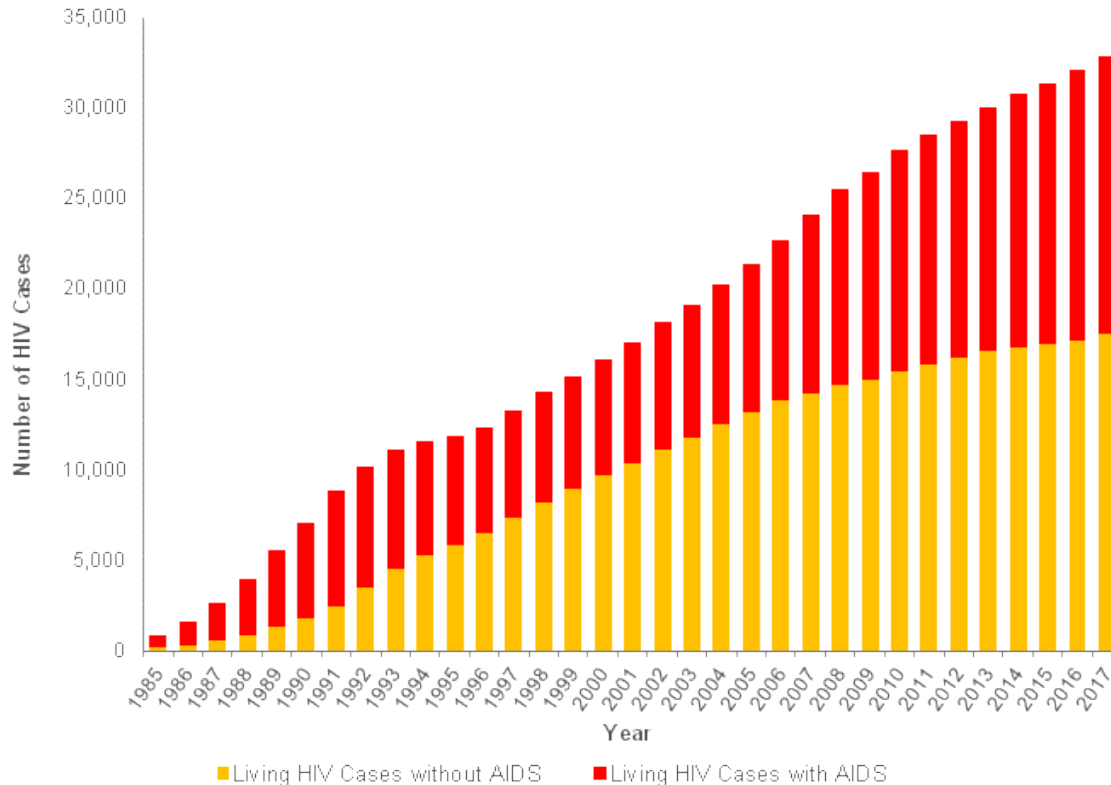
- New HIV diagnoses in Prince George's County decreased by 4% per year from 2011 to 2017 (320 in 2017)
- New HIV diagnoses in Montgomery County are stable at about 200
- Rank of 2017 HIV Diagnoses

1) Prince George's County	320	30.8%	41.9/100,000
2) Baltimore City	231	22.2%	44.7/100,000
3) Montgomery County	164	15.8%	18.6/100,000
4) Baltimore County	112	10.8%	15.9/100,000
5) Anne Arundel County	42	4.0%	8.7/100,000

2017 HIV Diagnosis Rates



HIV/AIDS Trends



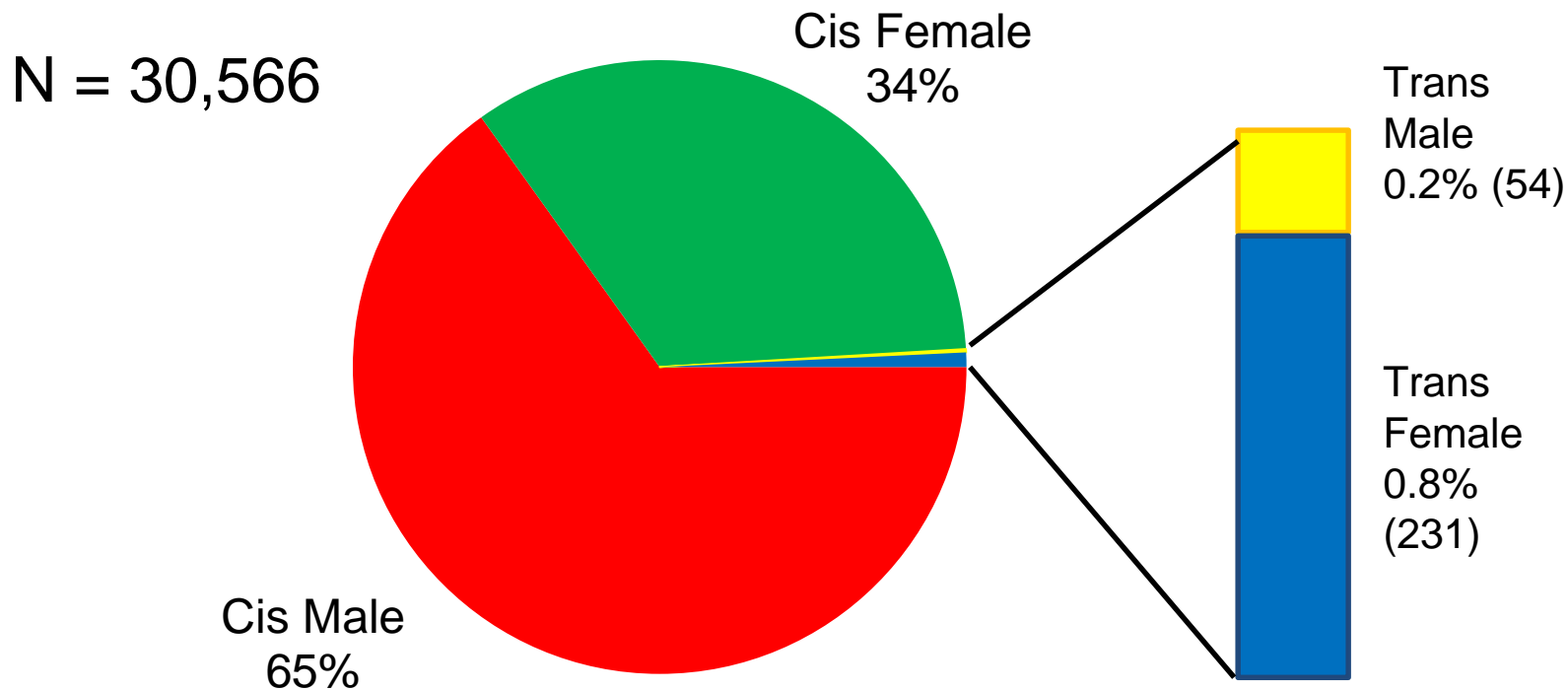
Alive on
12/31/2017

HIV 15,365

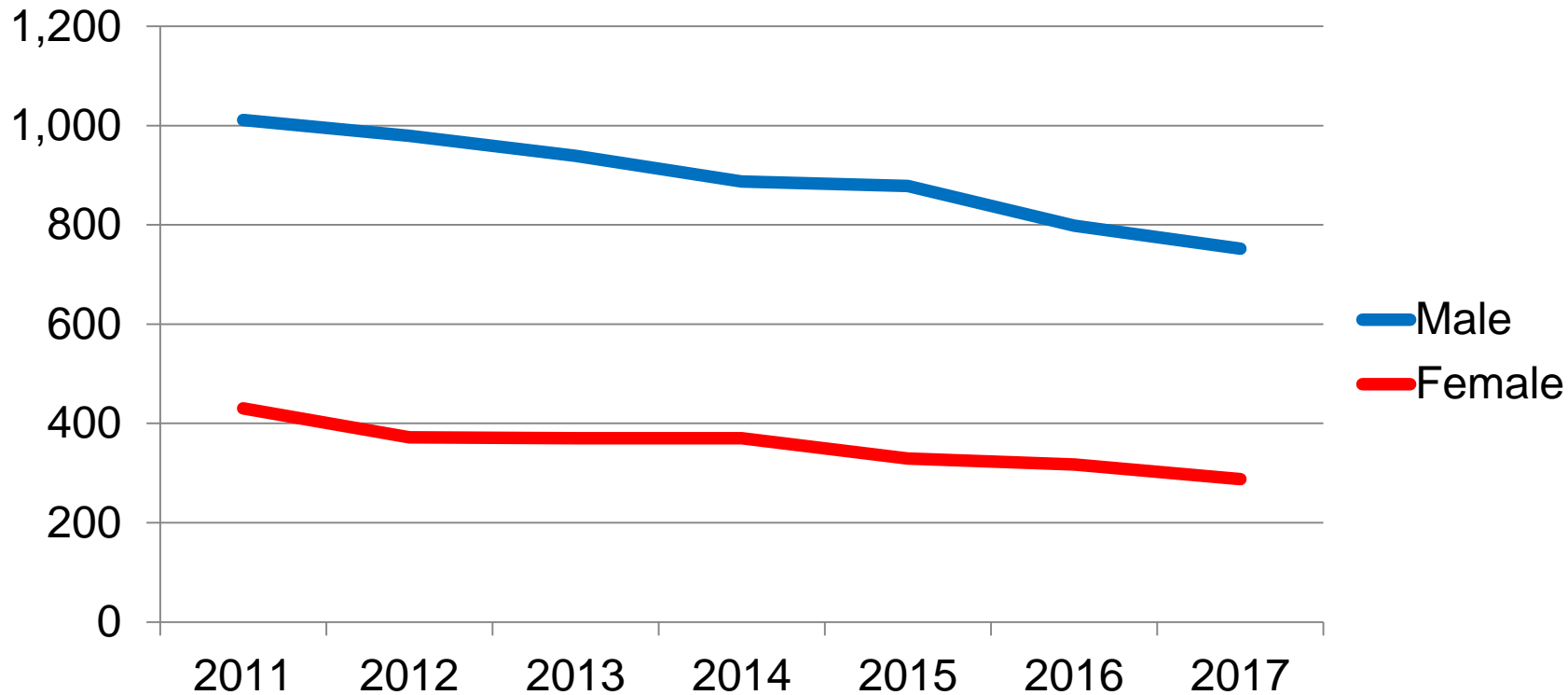
AIDS 17,527

Total 32,982

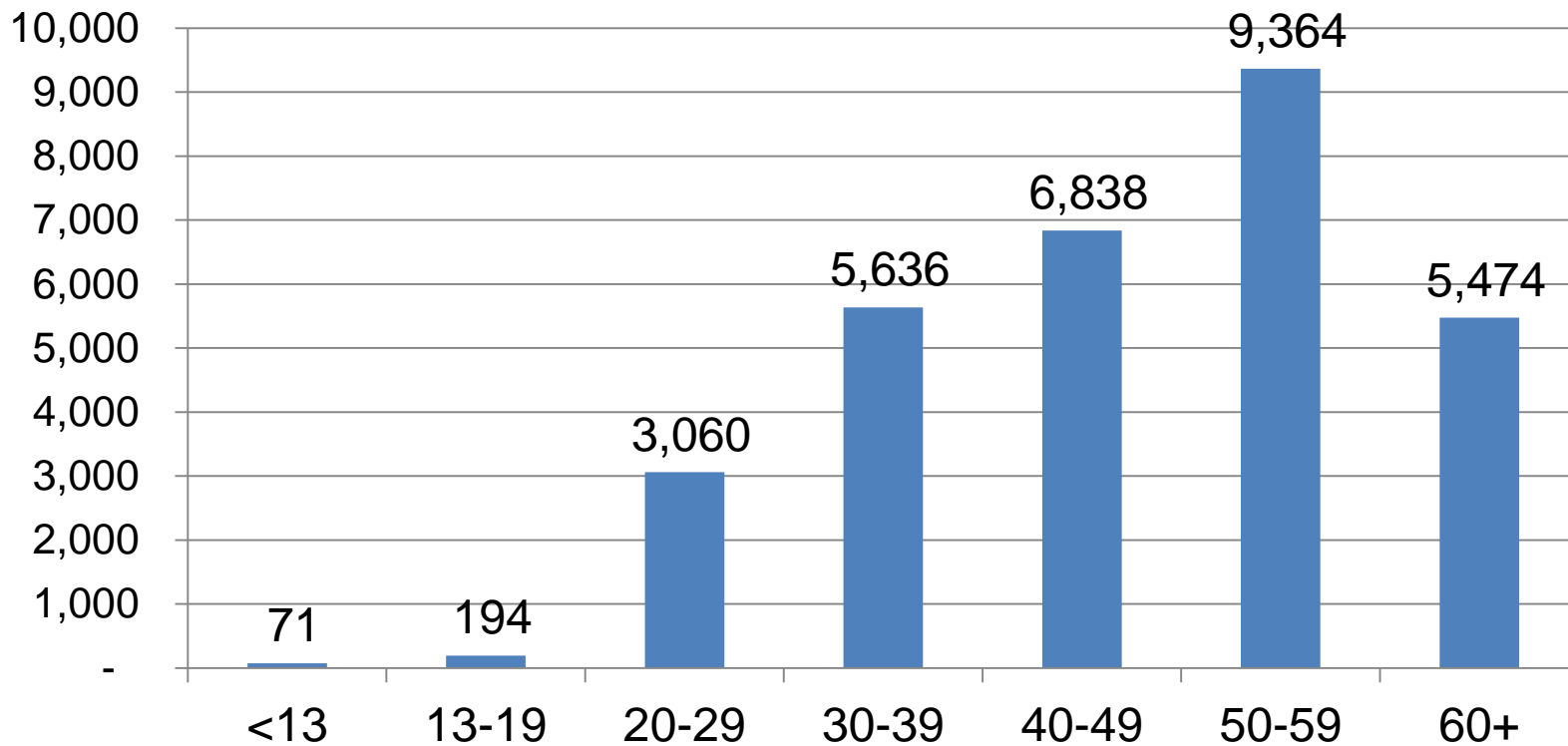
Living HIV Cases, Gender



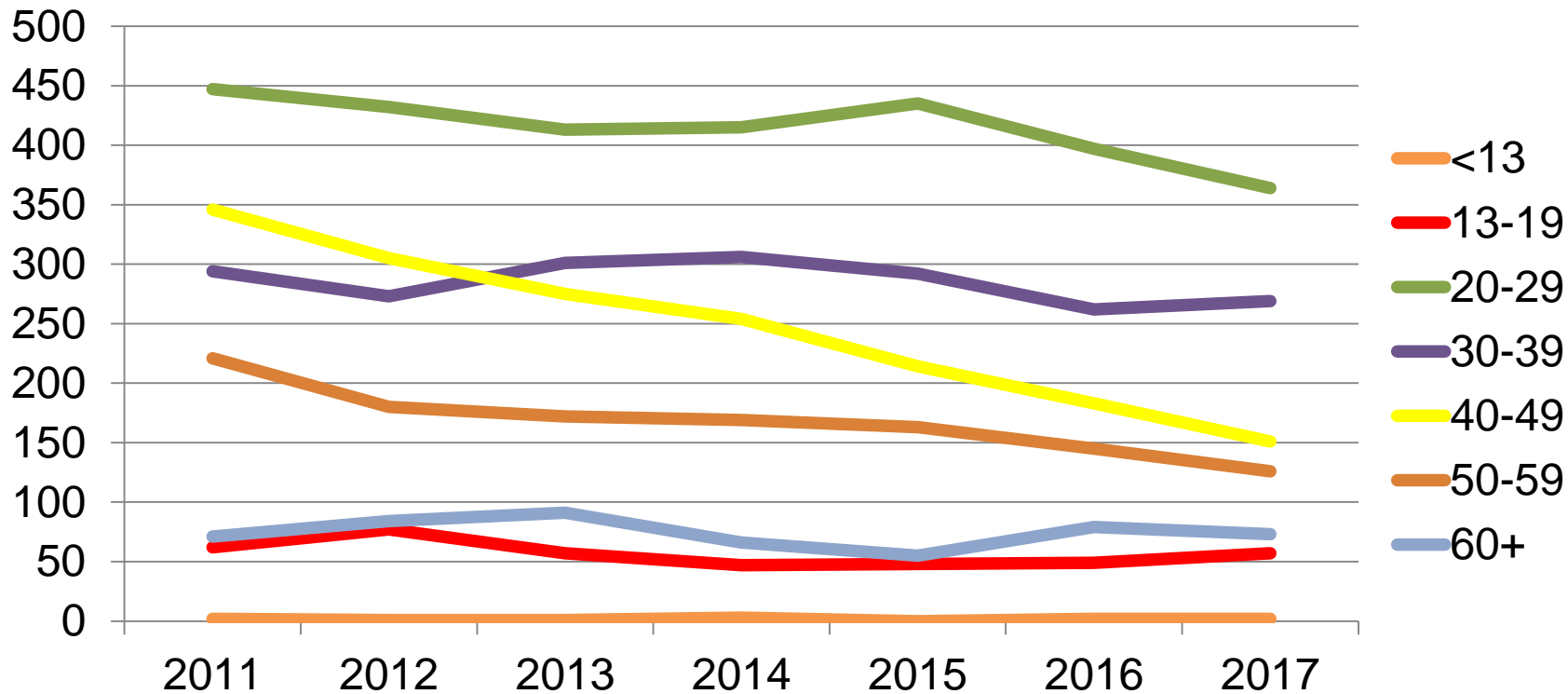
HIV Diagnoses, Sex at Birth



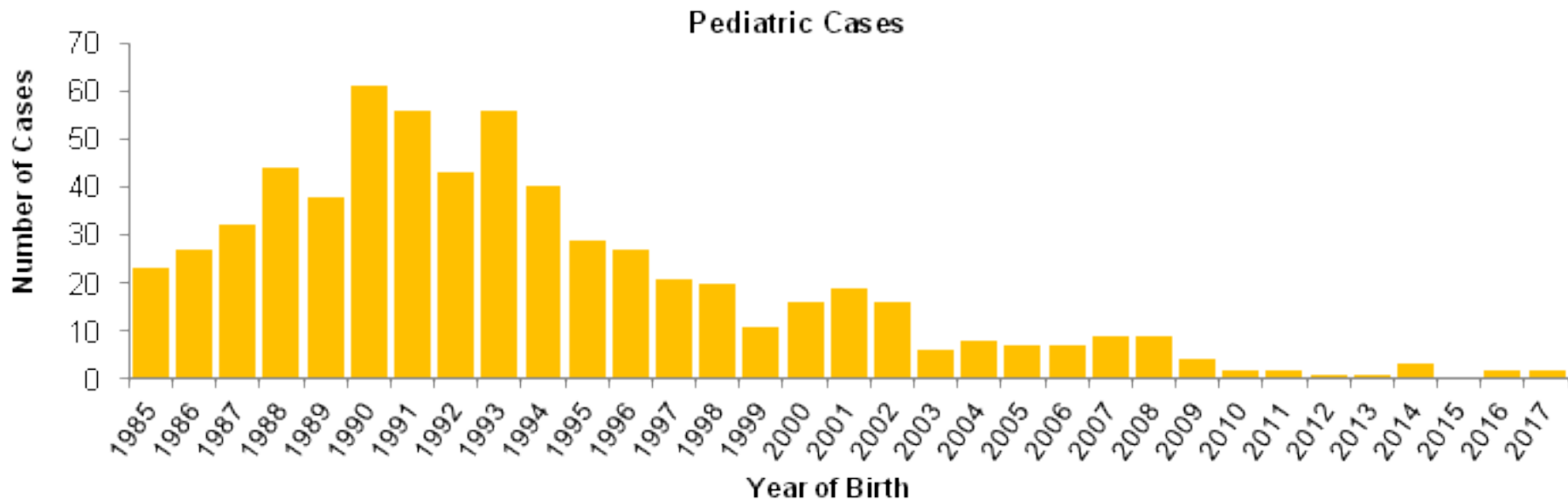
Living HIV Cases, Age on 12/31/2017



HIV Diagnoses, Age at Diagnosis

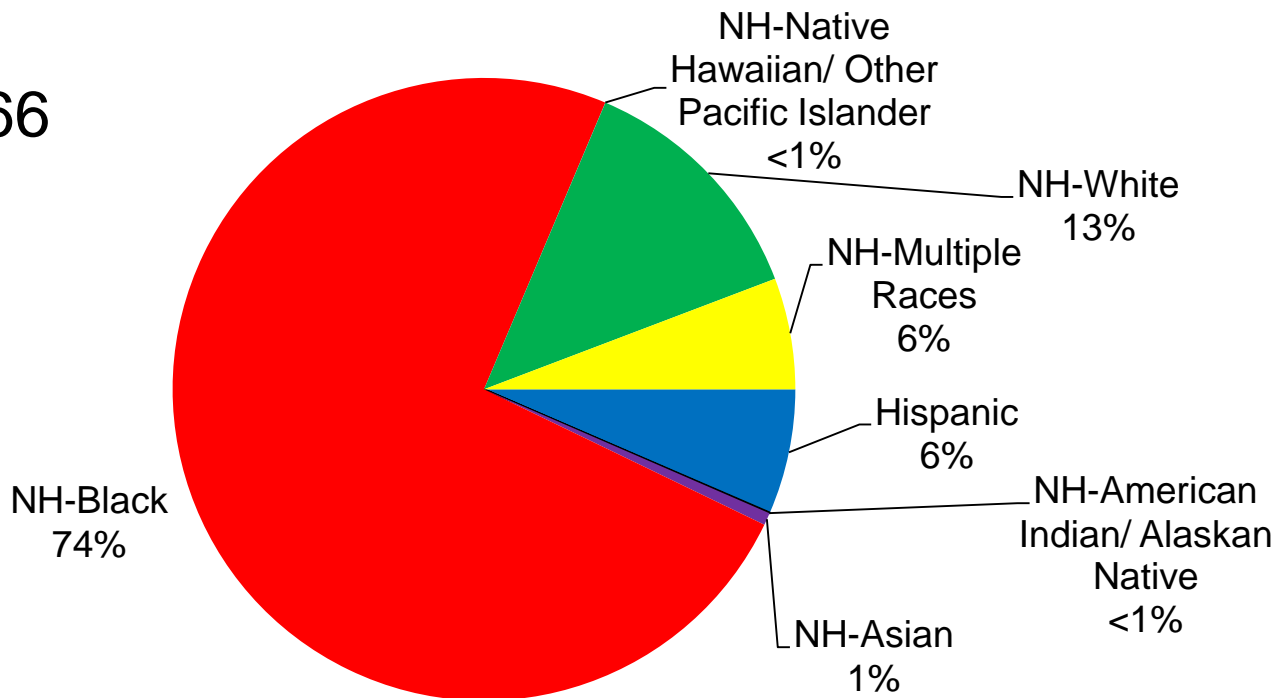


Pediatric HIV, Year of Birth

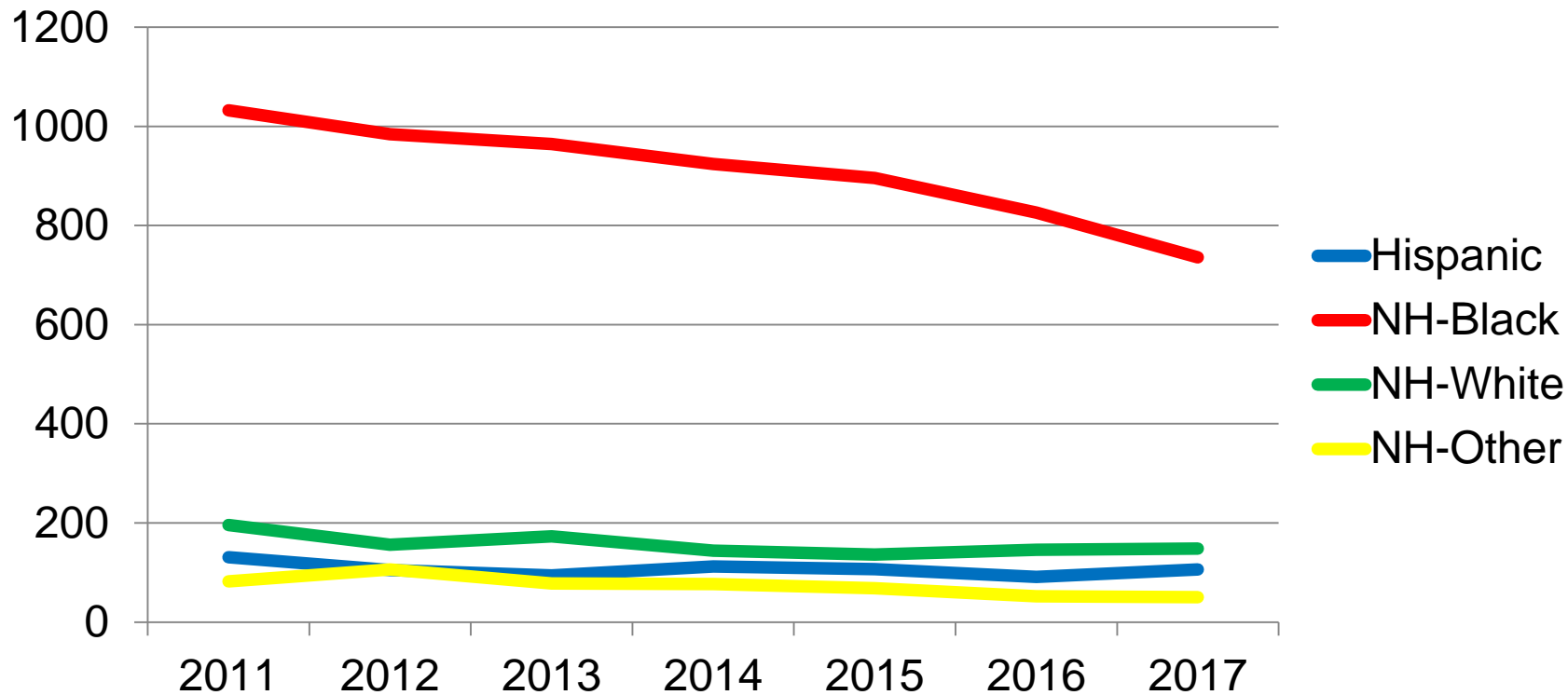


Living HIV Cases, Race/Ethnicity

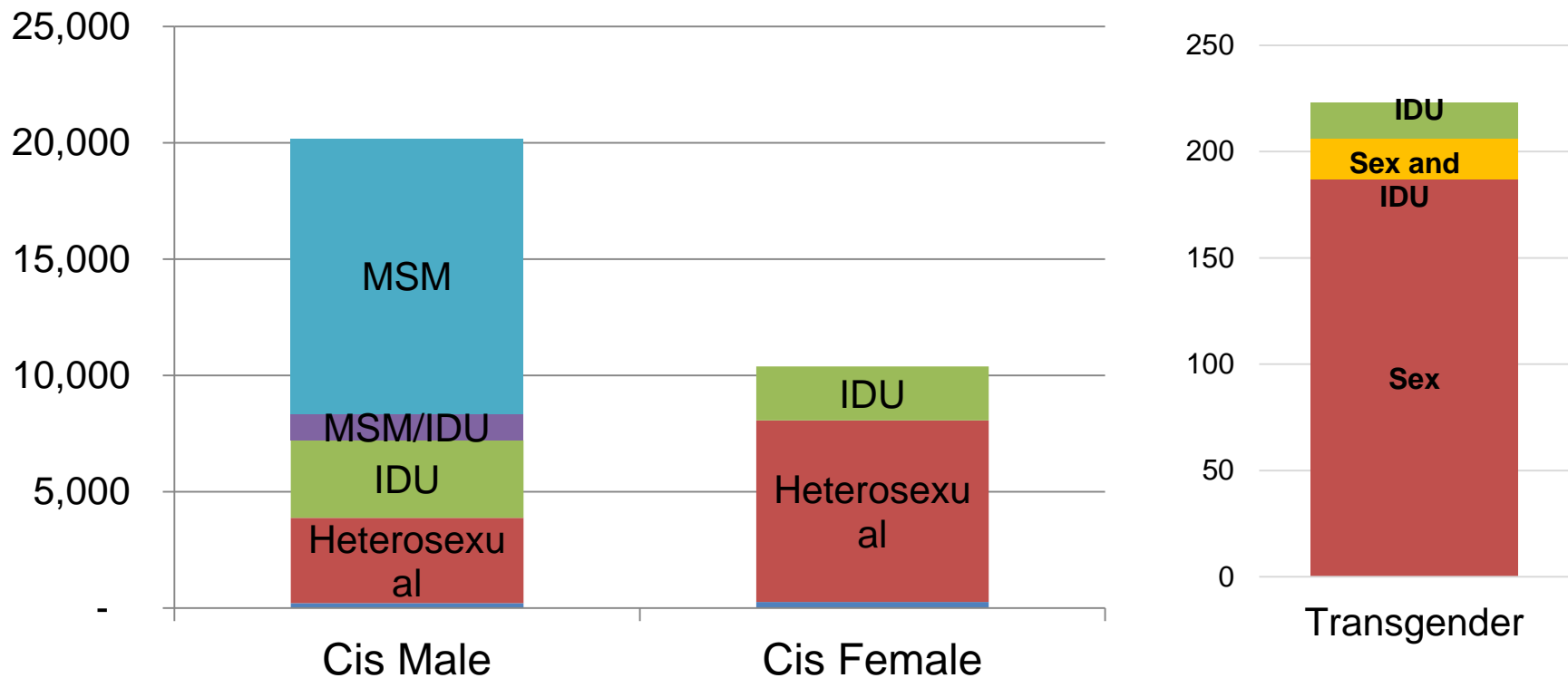
N = 30,566



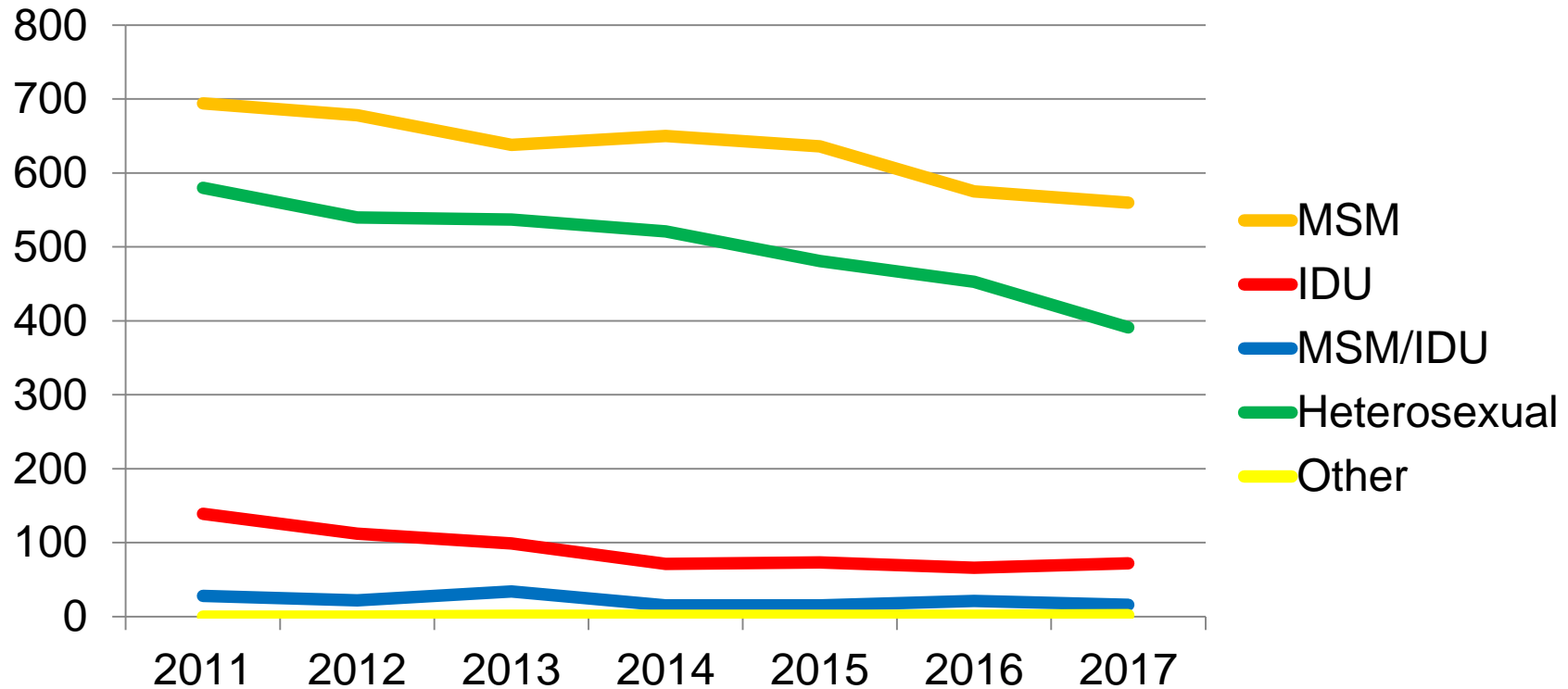
HIV Diagnoses, Race/Ethnicity



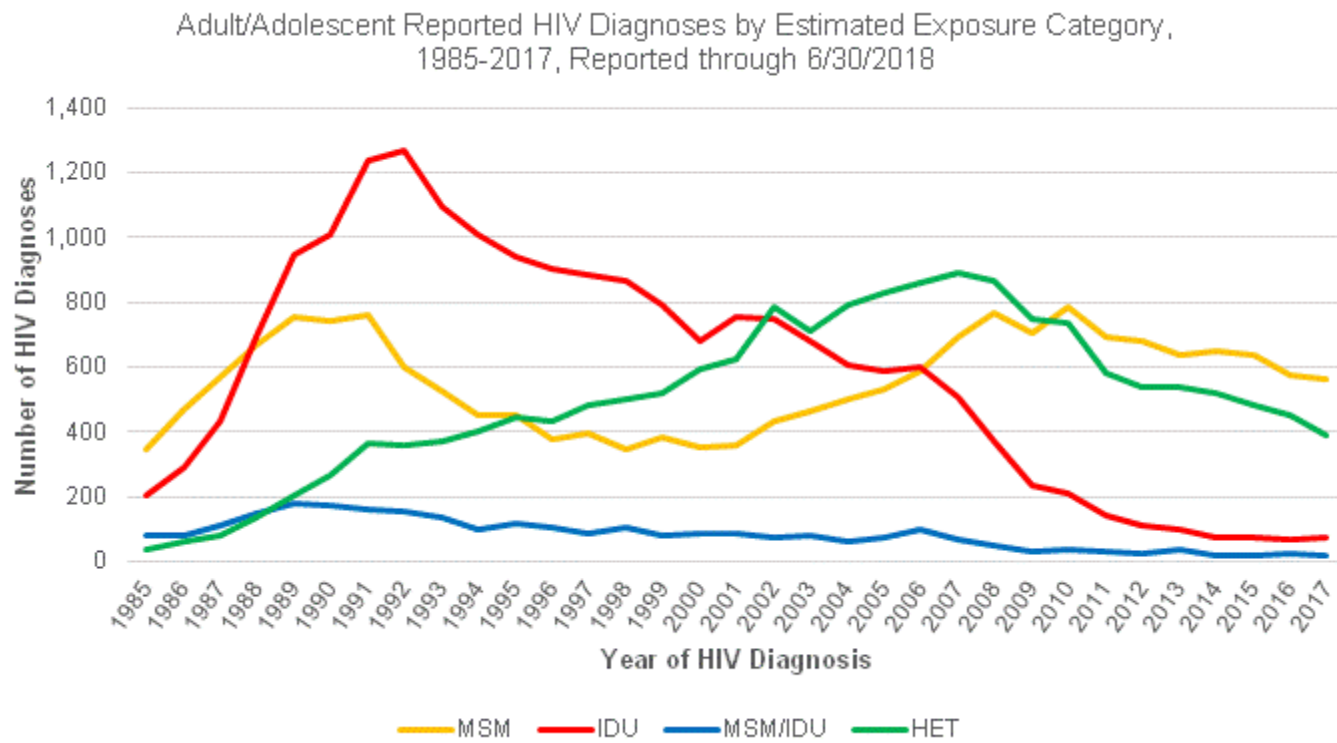
Living HIV Cases, Exposure Category



HIV Diagnoses, Exposure Category

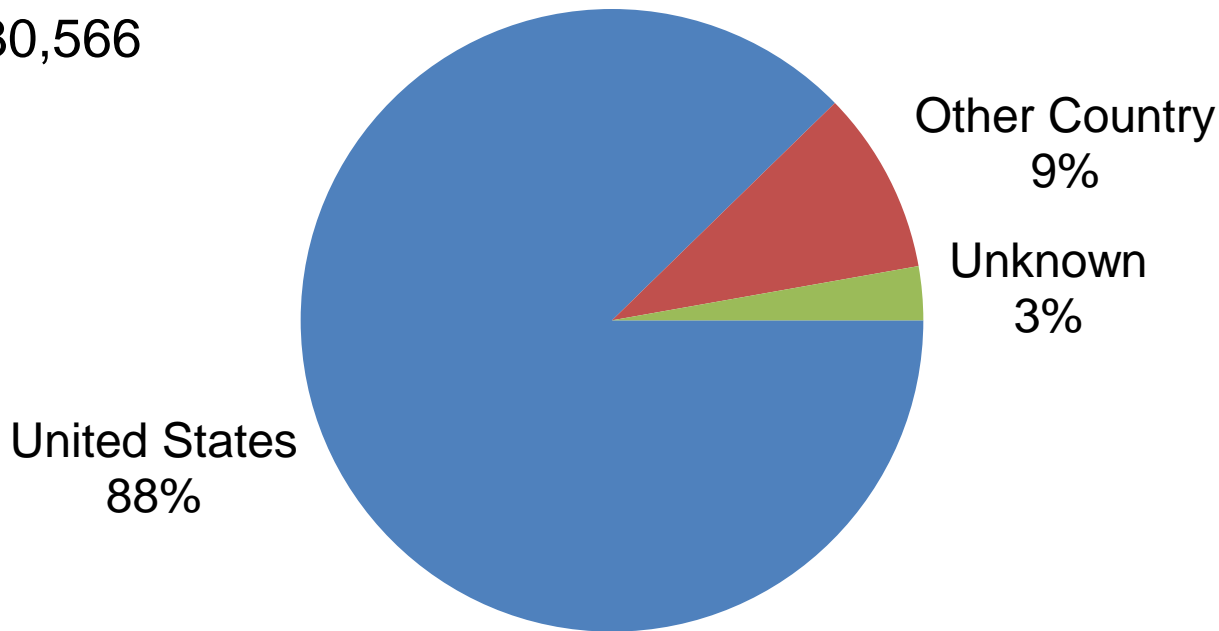


HIV Diagnoses, Exposure Category

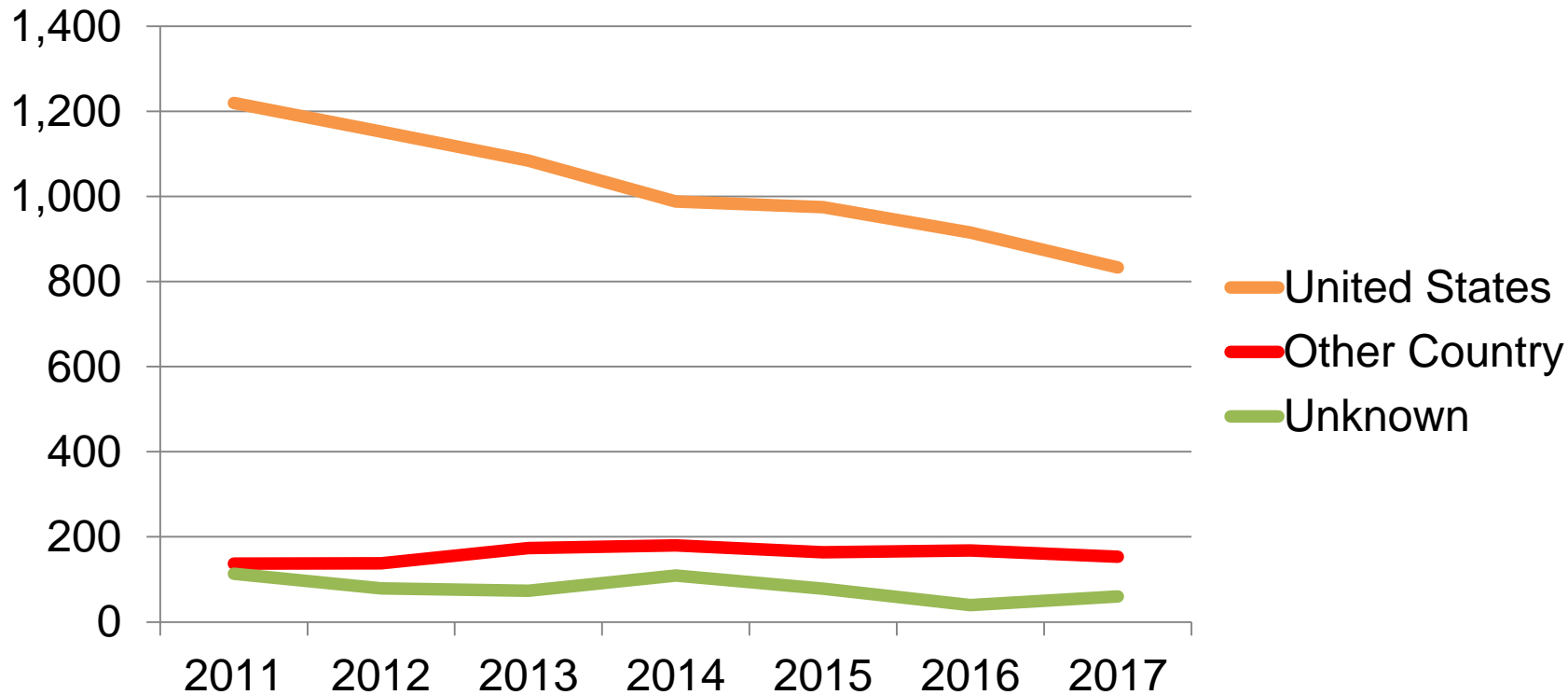


Living HIV Cases, Country of Birth

N = 30,566



HIV Diagnoses, Country of Birth



Living HIV Cases, Country of Birth

Country of Birth	N	%
United States	28,385	87.7
Cameroon	477	1.5
Ethiopia	301	0.9
Nigeria	223	0.7
El Salvador	206	0.6
Kenya	132	0.4
Haiti	103	0.3
Guatemala	93	0.3
Mexico	86	0.3
Liberia	80	0.2



Late HIV Diagnosis

- 1,040 new HIV diagnoses in 2017 with age 13+ at diagnosis
- 27.5% had an AIDS diagnosis within 12 months of their HIV diagnosis
- Median CD4 count after HIV diagnosis was 363 cells
- **One quarter of new HIV diagnoses were diagnosed late**

AIDS Diagnosis

- 582 new AIDS diagnoses in 2017 with age 13+ at HIV diagnosis
- 51.7% had their first HIV diagnosis within 12 months of their AIDS diagnosis
- **One half of new AIDS diagnoses were due to late diagnosis of HIV**

CD4 Depletion Model

- Without treatment, CD4 counts decrease at predictable rates after infection
- A statistical model uses the first CD4 count after diagnosis to estimate time since infection, HIV incidence, HIV prevalence, and percent undiagnosed
- 91% of 2017 HIV diagnoses had a CD4 count in the first 12 months after diagnosis

2016 Maryland Estimates

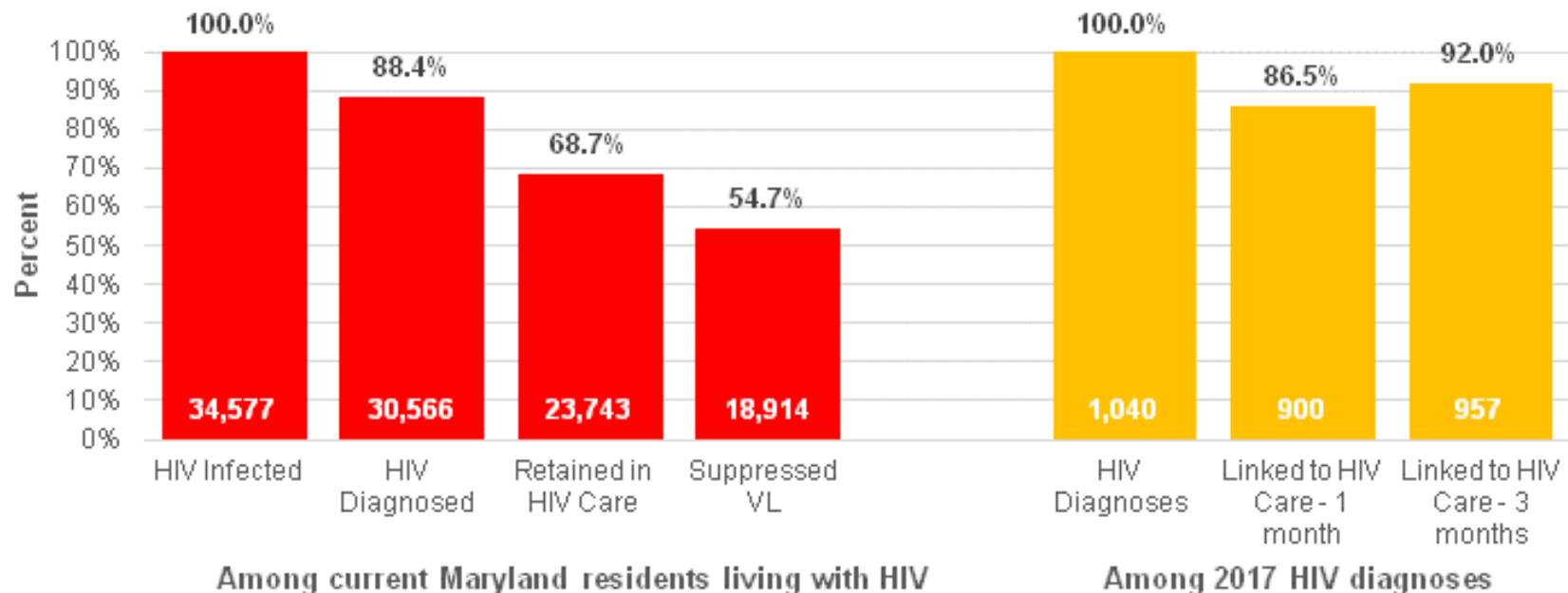
- Estimated Incidence 1,000
 - Estimated Time from Infection to Diagnosis 6.0 years
 - Estimated Prevalence 38,900
 - Estimated Number Undiagnosed 4,500
 - Estimated Percent Undiagnosed 11.6%
-
- **The average new diagnosis occurs 6 years after infection**

Deaths

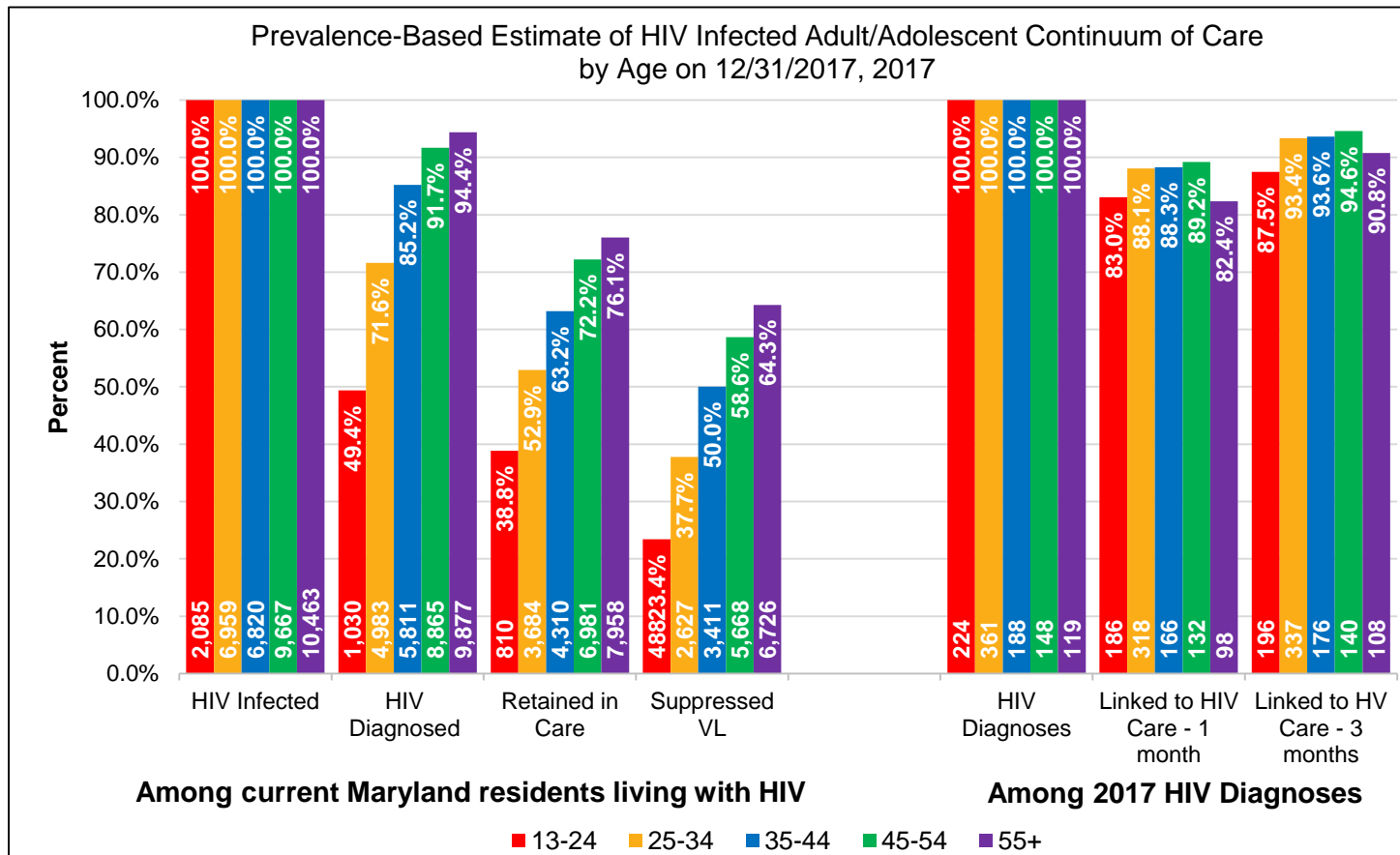
- Survival times have been improving. For AIDS cases diagnosed in 2000, only 70% were alive 5 years later. For 2012 diagnoses, 85% survived 5 years.
- However, there still were 489 deaths in 2015 among AIDS cases
- 8.1% of late HIV diagnoses in 2014 were deceased within 3 years compared to 0.8% of those not diagnosed late
- **Late diagnosed HIV cases were 10 times more likely to die within 3 years**

2017 Continuum of Care

Prevalence-Based Estimate of HIV Infected Adult/Adolescent Continuum of Care, 2017



2017 Continuum of Care by Age



Additional Epidemiological Data

- HIV Annual Epidemiological Profiles
 - Maryland (also quarterly updates)
 - Baltimore and Washington MSAs
 - 5 planning regions (Central, Eastern, Southern, Suburban, Western)
 - High morbidity jurisdictions (Baltimore City, Anne Arundel, Baltimore, Montgomery, and Prince George's counties)
 - Details by county (ZIP), age, sex, gender, race/ethnicity, country of birth, exposure category
- Population fact sheets
- County fact sheets



**Maryland Department of Health
Prevention and Health Promotion Administration**
<https://phpa.health.maryland.gov>

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Maryland HIV surveillance data and reports available at:
<https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx>